From:	Michelle Staffield <mstaffield@jlha.net>
Sent time:	10/23/2018 05:35:43 PM
To:	selim@sawayaeng.com; jmartin@trumpnational.com
Cc:	Ron Dragoo; Elias Sassoon; Michelle Kim <mkim@jlha.net>; Jillian Brickey <jbrickey@jlha.net>
Subject:	Trump National Golf Course; SUSMP Requirements
Attachments:	LA_MS4_Permit2001-2007_SUSMP pages.pdf Clarification letter RWQCB 12 16 06.pdf LID Plan Check Correction Sheet_Trump National_2018.07.23_REVISED.pdf Engineer Certification _SUSMP.pdf

Hi Selim,

Per your request, find attached the relevant sections of the 2001 MS4 Permit (NPDES Permit No. CAS004001). The regulatory agency (i.e. Los Angeles Regional Water Quality Control Board) provided a clarification letter (see attached) indicating that "these controls are achieved through the basic control measures that include infiltration, retention/detention, bioretention and biofilters."

As discussed, the Project's SUSMP may utilize flow-based bioretention BMPs, there are several companies that manufacturer bioretention BMPs to include:

1) Katchall Filtration Systems, Biofiltration Devices:
   https://www.katchall.net/biofiltration-devices
2) BioClean, Modular Wetland System:
   http://www.biocleanenvironmental.com/modular-wetlands-systems/

Please note that John L. Hunter & Associates does not endorse or has any affiliation with these companies.

Additionally, please find the revised Plan Check Correction Sheet and appropriate Engineer's Certification Page (attached).

Lastly, the Project is over 1 acre and requires a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must be submitted for review and deemed compliant with the CGP. Once authorized, the SWPPP must be uploaded to SMARTS and issued a WDID # prior to approval of the SUSMP.

Regards,
Michelle Staffield, P.E. | CPSWQ | QSD
Water Resources Engineer
John L. Hunter & Associates
6131 Orangethorpe Ave. **Suite 300** | Buena Park, Ca 90620
Office: (562) 802-7880 x **234** | Fax: (562) 802-2297

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(2) A watershed-wide plan has been developed for implementation of control measures to reduce erosion and stabilize drainage systems on a watershed basis.

2. Standard Urban Storm Water Mitigation Plans (SUSMPs)

a) Each Permittee shall amend codes and ordinances not later than August 1, 2002 to give legal effect to SUSMP changes contained in this Order. Changes to SUSMP requirements shall take effect not later than September 2, 2002.

b) Each Permittee shall require that a single-family hillside home:

(1) Conserve natural areas;

(2) Protect slopes and channels;

(3) Provide storm drain system stenciling and signage;

(4) Divert roof runoff to vegetated areas before discharge unless the diversion would result in slope instability; and

(5) Direct surface flow to vegetated areas before discharge unless the diversion would result in slope instability.

c) Each Permittee shall require that a SUSMP as approved by the Regional Board in Board Resolution No. R 00-02 be implemented for the following categories of developments:

(1) Ten or more unit homes (includes single family homes, multifamily homes, condominiums, and apartments);

(2) A 100,000 or more square feet of impervious surface area industrial/ commercial development;

(3) Automotive service facilities (SIC 5013, 5014, 5541, 7532-7534, and 7536-7539);

(4) Retail gasoline outlets;

(5) Restaurants (SIC 5812);

(6) Parking lots 5,000 square feet or more of surface area or with 25 or more parking spaces; and

(7) Redevelopment projects in subject categories that meet Redevelopment thresholds.

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d) Each Permittee shall submit an ESA Delineation Map for its jurisdictional boundary, based on the Regional Board's ESA Definition, no later than June 3, 2002, for approval by the Regional Board Executive Officer in consultation with the California Department of Fish and Game, and the California Coastal Commission.

e) Each Permittee shall require the implementation of SUSMP provisions no later than September 2, 2002, for all projects located in or directly adjacent to or discharging directly to an ESA, where the development will:

(1) Discharge storm water and urban runoff that is likely to impact a sensitive biological species or habitat; and

(2) Create 2,500 square feet or more of impervious surface area.

3. Numerical Design Criteria

The Permittees shall require that post-construction Treatment Control BMPs incorporate, at a minimum, either a volumetric or flow based treatment control design standard, or both, as identified below to mitigate (infiltrate, filter or treat) storm water runoff:

a) Volumetric Treatment Control BMP

(1) The 85th percentile 24-hour runoff event determined as the maximized capture storm water volume for the area, from the formula recommended in *Urban Runoff Quality Management, WEF Manual of Practice No. 23/ ASCE Manual of Practice No. 87, (1998*); or

(2) The volume of annual runoff based on unit basin storage water quality volume, to achieve 80 percent or more volume treatment by the method recommended in *California Stormwater Best Management Practices Handbook – Industrial/ Commercial,* (1993); or

(3) The volume of runoff produced from a 0.75 inch storm event, prior to its discharge to a storm water conveyance system; or

(4) The volume of runoff produced from a historical-record based reference 24-hour rainfall criterion for "treatment" (0.75 inch average for the Los Angeles County area) that achieves approximately the same reduction in pollutant loads achieved by the 85th percentile 24-hour runoff event.

b) Flow Based Treatment Control BMP

(1) The flow of runoff produced from a rain event equal to at least 0.2 inches per hour intensity; or

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(2) The flow of runoff produced from a rain event equal to at least two times the 85th percentile hourly rainfall intensity for Los Angeles County; or

(3) The flow of runoff produced from a rain event that will result in treatment of the same portion of runoff as treated using volumetric standards above.

4. Applicability of Numerical Design Criteria

The Permittees shall require the following categories of Planning Priority Projects to design and implement post-construction treatment controls to mitigate storm water pollution:

a) Single-family hillside residential developments of one acre or more of surface area;

b) Housing developments (includes single family homes, multifamily homes, condominiums, and apartments) of ten units or more;

c) A 100,000 square feet or more impervious surface area industrial/ commercial development;

d) Automotive service facilities (SIC 5013, 5014, 5541, 7532-7534 and 7536-7539) [5,000 square feet or more of surface area];

e) Retail gasoline outlets [5,000 square feet or more of impervious surface area and with projected Average Daily Traffic (ADT) of 100 or more vehicles]. Subsurface Treatment Control BMPs which may endanger public safety (i.e., create an explosive environment) are considered not appropriate;

f) Restaurants (SIC 5812) [5,000 square feet or more of surface area];

g) Parking lots 5,000 square feet or more of surface area or with 25 or more parking spaces;

h) Projects located in, adjacent to or discharging directly to an ESA that meet threshold conditions identified above in 2.e; and

i) Redevelopment projects in subject categories that meet Redevelopment thresholds.

5. Not later than March 10, 2003, each Permittee shall require the implementation of SUSMP and post-construction control requirements for the industrial/commercial development category to projects that disturb one acre or more of surface area.

6. Site Specific Mitigation

Each Permittee shall, no later than September 2, 2002, require the implementation of a site-specific plan to mitigate post-development storm water for new development and redevelopment not requiring a SUSMP

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but which may potentially have adverse impacts on post-development storm water quality, where one or more of the following project characteristics exist:

a) Vehicle or equipment fueling areas;

b) Vehicle or equipment maintenance areas, including washing and repair;

c) Commercial or industrial waste handling or storage;

d) Outdoor handling or storage of hazardous materials;

e) Outdoor manufacturing areas;

f) Outdoor food handling or processing;

g) Outdoor animal care, confinement, or slaughter; or

h) Outdoor horticulture activities.

7. Redevelopment Projects

The Permittees shall apply the SUSMP, or site specific requirements including post-construction storm water mitigation to all Planning Priority Projects that undergo significant Redevelopment in their respective categories.

a) Significant Redevelopment means land-disturbing activity that results in the creation or addition or replacement of 5,000 square feet or more of impervious surface area on an already developed site.

Where Redevelopment results in an alteration to more than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post development storm water quality control requirements, the entire project must be mitigated. Where Redevelopment results in an alteration to less than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post development storm water quality control requirements, only the alteration must be mitigated, and not the entire development.

b) Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of facility or emergency redevelopment activity required to protect public health and safety.

c) Existing single family structures are exempt from the Redevelopment requirements.

8. Maintenance Agreement and Transfer

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Each Permittee shall require that all developments subject to SUSMP and site specific plan requirements provide verification of maintenance provisions for Structural and Treatment Control BMPs, including but not limited to legal agreements, covenants, CEQA mitigation requirements, and or conditional use permits. Verification at a minimum shall include:

a) The developer's signed statement accepting responsibility for maintenance until the responsibility is legally transferred; and either

b) A signed statement from the public entity assuming responsibility for Structural or Treatment Control BMP maintenance and that it meets all local agency design standards; or

c) Written conditions in the sales or lease agreement, which requires the recipient to assume responsibility for maintenance and conduct a maintenance inspection at least once a year; or

d) Written text in project conditions, covenants and restrictions (CCRs) for residential properties assigning maintenance responsibilities to the Home Owners Association for maintenance of the Structural and Treatment Control BMPs; or

e) Any other legally enforceable agreement that assigns responsibility for the maintenance of post-construction Structural or Treatment Control BMPs.

9. Regional Storm Water Mitigation Program

A Permittee or Permittee group may apply to the Regional Board for approval of a regional or sub-regional storm water mitigation program to substitute in part or wholly SUSMP requirements. Upon review and a determination by the Regional Board Executive Officer that the proposal is technically valid and appropriate, the Regional Board may consider for approval such a program if its implementation will:

a) Result in equivalent or improved storm water quality;

b) Protect stream habitat;

c) Promote cooperative problem solving by diverse interests;

d) Be fiscally sustainable and has secure funding; and

e) Be completed in five years including the construction and start-up of treatment facilities.

Nothing in this provision shall be construed as to delay the implementation of SUSMP requirements, as approved in this Order.

10. Mitigation Funding

The Permittees may propose a management framework, for endorsement by the Regional Board Executive Officer, to support regional or sub-

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regional solutions to storm water pollution, where any of the following situations occur:

a) A waiver for impracticability is granted;

b) Legislative funds become available;

c) Off-site mitigation is required because of loss of environmental habitat; or

d) An approved watershed management plan or a regional storm water mitigation plan exists that incorporates an equivalent or improved strategy for storm water mitigation.

11. California Environmental Quality Act (CEQA) Document Update

Each Permittee shall incorporate into its CEQA process, with immediate effect, procedures for considering potential storm water quality impacts and providing for appropriate mitigation when preparing and reviewing CEQA documents. The procedures shall require consideration of the following:

a) Potential impact of project construction on storm water runoff;

b) Potential impact of project post-construction activity on storm water runoff;

c) Potential for discharge of storm water from areas from material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work areas;

d) Potential for discharge of storm water to impair the beneficial uses of the receiving waters or areas that provide water quality benefit;

e) Potential for the discharge of storm water to cause significant harm on the biological integrity of the waterways and water bodies;

f) Potential for significant changes in the flow velocity or volume of storm water runoff that can cause environmental harm; and

g) Potential for significant increases in erosion of the project site or surrounding areas.

12. General Plan Update

a) Each Permittee shall amend, revise or update its General Plan to include watershed and storm water quality and quantity management considerations and policies when any of the following General Plan elements are updated or amended: (i) Land Use, (ii) Housing, (iii) Conservation, and (iv) Open Space.

b) Each Permittee shall provide the Regional Board with the draft amendment or revision when a listed General Plan element or the

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General Plan is noticed for comment in accordance with Cal. Govt. Code § 65350 *et seq*.

13. Targeted Employee Training

Each Permittee shall train its employees in targeted positions (whose jobs or activities are engaged in development planning) regarding the development planning requirements on an annual basis beginning no later than August 1, 2002, and more frequently if necessary. For Permittees with a population of 250,000 or more (2000 U.S. Census), training shall be completed no later than February 3, 2003.

14. Developer Technical Guidance and Information

a) Each Permittee shall develop and make available to the developer community SUSMP (development planning) guidelines immediately.

b) The Principal Permittee in partnership with Permittees shall issue no later than February 2, 2004, a technical manual for the siting and design of BMPs for the development community in Los Angeles County. The technical manual may be adapted from the revised California Storm Water Quality Task Force Best Management Practices Handbooks scheduled for publication in September 2002. The technical manual shall at a minimum include:

(1) Treatment Control BMPs based on flow-based and volumetric water quality design criteria for the purposes of countywide consistency;

(2) Peak Flow Control criteria to control peak discharge rates, velocities and duration;

(3) Expected pollutant removal performance ranges obtained from national databases, technical reports and the scientific literature;

(4) Maintenance considerations; and

(5) Cost considerations.

E. Development Construction Program

1. Each Permittee shall implement a program to control runoff from construction activity at all construction sites within its jurisdiction. The program shall ensure the following minimum requirements are effectively implemented at all construction sites:

a) Sediments generated on the project site shall be retained using adequate Treatment Control or Structural BMPs;

b) Construction-related materials, wastes, spills, or residues shall be retained at the project site to avoid discharge to streets, drainage

California Regional Water Quality Control Board

Los Angeles Region

Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

Linda S. Adams
Agency Secretary

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.waterboards.ca.gov/losangeles

Arnold Schwarzenegger
Governor

December 15, 2006

Mark Pestrella, Assistant Deputy Director
Department of Public Works
County of Los Angeles
700 South Fremont Ave.
Alhambra, CA 91803

Directors, Department of Public Works and
Directors, Department of Planning
Municipal Permittees within County of Los Angeles

CLARIFICATION TO PART 4.D. DEVELOPMENT PLANNING PROGRAM, THE LOS ANGELES COUNTY MUNICIPAL STORM WATER PERMIT, ORDER No. 01-182, NPDES PERMIT No. CAS004001

Dear Mr. Pestrella and Municipal Directors:

Thank you for requesting clarification on the Development Planning requirements of the Los Angeles County Municipal Storm Water Permit (L.A. County MS4 Permit).

This letter restates the compliance expectation of the California Regional Water Quality Control Board, Los Angeles Region (L.A. Water Board), when it adopted the requirements in 'Part 4 §D, Development Planning' of the L.A. County MS4 Permit. Part 4.D contains specific provisions that are fully enforceable, and which were also contained in the Development Planning Model Program submitted by the L.A. County Permitees, and which was approved in 2000.

Our evaluation of the implementation of the Development Planning and Standard Urban Stormwater Mitigation Plan (SUSMP) requirements on land development projects in Los Angeles County has revealed that many Permittees' planning and public works departments and their associated staff, including architects, planners and engineers have failed to integrate SUSMP implementation adequately with other storm water quality management strategies required in the L.A. County MS4 permit. The L.A. Water Board has identified several instances of inadequate or uncoordinated implementation by Permitttes for 'Part 4.D Development Planning'.

U.S. EPA Guidance

In areas undergoing new development or redevelopment, the most effective method of controlling impacts from storm water discharges is to limit the amount of rainfall that is converted to runoff. By utilizing design techniques that incorporate on-site storage and infiltration, and minimizing the amount of directly connected impervious surfaces, the amount of runoff generated from the site can be significantly reduced (*Preliminary Data Summary of Urban Storm Water Best Management Practices*, EPA 821-R-99-012, August 1999).

The three provisions in Part 4.D are consistent with guidance in Chapter 5 of *Preliminary Data Summary of Urban Storm Water Best Management Practices*. The U.S. EPA guidance states that in order to meet the goals of post-development peak discharge rate, volume and pollutant loading to receiving waters being the same as pre-development values, BMPs should be implemented to achieve three main objectives: flow control, pollutant removal and pollutant source reduction.

California BMP Manual

Similarly, Section 2.4 of the California Stormwater Quality Association (CASQA) BMP Handbook for Development and Redevelopment (2003), in its discussion on planning and design principles, reiterates the provisions in Part 4.D. These principles promote three basic strategies in the following order of preference based on effectiveness and costs: (1) reduce or eliminate post-project runoff; (2) control sources of pollutants; and (3) treat contaminated storm water runoff before discharging it to natural water bodies.

Groundwater Quality Protection Concern

Some Permittees have expressed a concern that infiltration of storm water may present risks to groundwater aquifers. Generally, the common pollutants in storm water are filtered or adsorbed by soil, and unlike hydrophobic solvents and salts, do not cause groundwater contamination. In any case, infiltration of 1-2 inches of rainfall in semi-arid areas like Southern California where there is a high rate of evapo-transpiration, presents minimal risks.

The Water Augmentation Study conducted by the Los Angeles and San Gabriel Rivers Watershed Council, in partnership with several agencies including water districts, municipalities, and the U.S. Bureau of Reclamation, indicates that the infiltration of storm water, with appropriate pretreatment, does not adversely impact groundwater quality (*Los Angeles Basin Water Augmentation Study, August 2005*). You may view the study at www.lasgrwc.org/WAS.htm

Infiltration of storm water discharges from heavy industrial areas is seldom appropriate. Where there is a real concern on the risk of groundwater contamination from preexisting soil contamination or heavy vehicular traffic when installing infiltration systems such as extended detention basins, the L.A. Water Board and the California Department of Transportation (Caltrans) developed guidance to ensure an adequate analysis for proper

siting. See, *Infiltration Basin -Site Selection Study, Volumes I, II, and III* June 2003, CTSW-RT-03-025, http://www.dot.ca.gov/hq/env/stormwater/special/newsetup/index.htm

Caltrans research indicates that infiltration basins and biofiltration BMPs are technically feasible if site site-specific considerations are taken into account (Caltrans CTSW-RT-01-050, *BMP Retrofit Pilot Program, January 2004*).

Background of MS4 Development Planning Requirements

Standard Urban Storm Water Mitigation Plan

On March 8, 2000, the L.A. Water Board adopted the SUSMP, and required that municipalities incorporate into the planning and design phases post-construction storm water mitigation controls for specified development and redevelopment projects. Although the SUSMP action was petitioned by some municipalities to the State Water Resources Control Board (State Water Board), the State Water Board directed in Water Quality Order 2000-11 that, *"the Permittees shall amend codes, if necessary, not later than **January 15, 2001**, to give legal effect to the SUSMP requirements. The SUSMP requirements shall take effect not later than **February 15, 2001**."*

On November 7, 2003, the L.A. Water Board transmitted the Development Planning Program Review Report after auditing four Permittee Programs (the Planning Review Report). The Planning Review Report presented and described discernible permit violations, deficiencies, and notable elements observed during the audit. Notably, the MS4 Development Planning program contained in Board Order No. 01-182 is built upon programs already established in previous Board Orders (90-079 and 96-054), after undergoing a very long process of public hearings and meetings before permit adoption.

Nearly six years later after the SUSMP was adopted, most Permittees' implementation of SUSMPs is deficient, because Permittees have not focused nor emphasized water quality pollution mitigation to protect the beneficial uses of receiving waters.

Consequently, the L.A. Water Board provides the following clarification consistent with the L.A. Water Board's mission of protecting water quality and preserving water resources:

A. Essential Post Construction Control Requirements

1. The three provisions in Part 4.D are the essential requirements for compliance with the Development Planning requirements of the L.A. County MS4 Permit. The three provisions are to: (1) maximize the percentage of pervious surfaces to allow percolation of storm water into the ground; (2) minimize the quantity of storm water directed to impervious surfaces and the MS4; and (3) minimize pollution emanating from parking lots through the use of appropriate treatment control BMPs and good housekeeping practices.

The basic site design planning considerations for post-construction storm water BMP implementation are to:

a. Preserve the natural drainage system, protect slopes and provide controls for stream protection. These controls are achieved through the basic control measures that include infiltration, retention/detention, bioretention and biofilters;

b. Integrate fully the opportunities to maximize the percentage of pervious surfaces and minimize the volume of storm water runoff;

c. Utilize a BMP treatment-train that (i) captures and infiltrates using infiltration basins, infiltration trenches, retention and/or detention BMPs; and/or (ii) provide flow through treatment in the order of preference for the prescribed storm water quality runoff volume ($\mathbf{Q_{wv}}$) based on the numerical mitigation criteria in Part 4.D;

d. Identify the combination of BMP treatment trains that are to be sized, designed and constructed based on $\mathbf{Q_{wv}}$ required for water quality. Using $\mathbf{Q_P}$ from 10, 20, or 50-year return-period for flood management is inappropriate for water quality purposes and not cost effective. Capturing and treating a larger percentage of the annual storm water runoff volume greater than $\mathbf{Q_{wv}}$ provides only a small increase in additional removal of pollutants and considerably increases the sizing and cost of the structural and treatment storm water controls; and

e. Establish in addition, for downstream channel protection, instead of $\mathbf{Q_P}$ a flow control criteria (Q_{HMC}) which takes into consideration flow volume, duration, and frequency to maintain the predevelopment distribution of in-stream flows above the critical flow for streambed erosion, thus preserving the pre-development capacity to transport sediment, while not accelerating down stream erosion. An appropriate hydromodification flow duration control criteria might be to set the Q_{HMC} such that the post-construction discharge rates and duration match the ranges from 10 percent of the pre-development 2-year 24 hour peak flow up to the pre-development 10 year 24 hour peak flow, unless an alternative criterion can be demonstrated as equally protective using hydrodynamic modeling.

2. Measures and Approaches for Minimizing Impervious Surface Area

a. Permittees must minimize the percentage of impervious surfaces to support the percolation and infiltration of storm water into the ground and/or minimize pollutants emanating from impervious surfaces by reducing the percentage of effective impervious area to a generally accepted standard of 5 percent or less of total project area.

The U.S. EPA storm water technology fact sheet for bioretention recommends that sizing criterion should be 5 to 7 percent of the drainage area multiplied by the rational method runoff coefficient "C" determined for the site (*Storm Water Technology Fact Sheet, Bioretention*, U.S. EPA Document No. EPA 832-F-99-012, September 1999). However, a lower sizing criterion may be more appropriate for

Southern California. A recent study determined that physical degradation of stream channels in semi-arid climates such as in Southern California may be detectable with watershed impervious cover between 3 and 5 percent (*Effects of Increases in Peak Flows and Imperviousness on the Morphology of Southern California Stream,* SCCWRP, April 2005).

b. Permittees must also control pollution emanating from impervious surfaces such as roof-tops, parking lots, and roadways through the use of appropriate source controls such as the use of low impact development (LID) and integrated water resources management strategies that:

   1. Emphasize conservation and the use of on-site natural features;
   2. Integrate engineered small-scale hydrologic controls to more closely reflect pre-development hydrologic functions. Small-scale hydrologic controls are BMPs that create green infrastructure and spaces such as park-like open space, rainwater collection barrels, planter boxes, and garden-like areas that promote community awareness and improve storm water quality; and
   3. Implement primarily a source control and minimize the need for large sub-regional and regional treatment control BMPs.

B. Plan Preparation/ Review Procedures and Guidelines

1. Permittees must possess clear and adequate legal authority in municipal storm water ordinances to address post-construction requirements in the L.A. County MS4 Permit. The legal authority must direct land developers to review and mitigate the adverse storm water quality impacts in the Environmental Impact Report (EIR), and to ensure that adequate post-construction control measures are incorporated during the development project's site planning and design phases. In addition, clear instructions should be provided on how to illustrate on plans the BMPs selected, adequate sizing, and BMP siting;

2. The selection of the treatment train of BMPs must be conducted through a methodical selection process that matches the type of BMP with the type and nature of pollutants that are expected to be generated from the site. For example, vortex separation devices installed in high commerce areas for removing trash and gross solids are not suitable for removing pollutants in dissolved state or smaller size/lighter weight fractions from vehicular traffic areas;

3. Permittees should also prescribe guidelines for the submittal of standard final SUSMP plans so that relevant storm water BMP locations and specifications in design sheets are clearly identified. Separate SUSMP detail plan sheets will facilitate technical review.

   Delineation of drainage area and/or sub-areas, natural drainage systems, storm drains, and other relevant parameters at pre-development and post-development water flow paths, outfall (drainage) locations, BMP detail plans, and other relevant information should be presented. Simply inserting post-development plans within the grading plans, storm drain plans, or civil plans with unrelated detail drawings, numbers, and

construction notes makes it difficult to review and evaluate. Small-scale controls may be combined with the landscaping plans;

4. Plan view and sectional plans for small-scale hydrologic controls for a lot size and sub-drainage area of the sites should be prescribed; and

5. BMP design specifications must be incorporated in the SUSMP report together with hydrologic calculations for sizing BMPs. This report should support and show how criteria were adequately utilized in sizing BMPs (e.g., infiltration, retention/detention BMPs, bioretention facilities, etc.);

If you have any questions, please call Dr. Xavier Swamikannu at (213) 620-2094 or Carlos D. Santos at (213) 620-2093.

Sincerely,

Original Signed

Jonathan Bishop, P.E.
Executive Officer

cc: Michael Levy, Office of the Chief Counsel, State Water Board
Darrin Polhemus, Division of Water Quality, State Water Board
Bruce Fujimoto, Division of Water Quality, State Water Board

LID Plan Check Correction Sheet_Trump National_2018.07.23_REVISED.pdf

RANCHO PALOS VERDES

STANDARD URBAN STORMWATER MITIGATION PLAN (SUSMP) CHECKLIST

The purpose of this checklist is to provide a format for uniform, comprehensive, and well-documented reviews of the Standard Urban Stormwater Mitigation Plan (SUSMP) submitted by project applicants. The completed checklist should be transmitted to the project applicant with the project SUSMP. A copy of the completed checklist should be retained with the project planning/permitting file.

Contact Name:	Selim R Sawaya	Permit Case No:	
Contact Title:	President	Site Name:	Trump National Golf Course (Tract 50666)
Company Name:	Sawaya Engineering Consultants, INC.	Site Address:	One Trump National Drive
Mailing Address:	26950 Ironstone Drive	Type of Facility:	
City, State, Zip:	Yorba Linda, CA 92887	Submittal Date:	07/17/2018
Phone Number:	(626) 715-2320	Plan Return Date:	07/23/2018
Email Address:	selim@sawayaeng.com	Disturbed Area:	

First Review
LID Plan Received on: 07/17/2018
Review Completed on: 07/23/2018

Second Review
LID Plan Received on:
Review Completed on:

Third Review
LID Plan Received on:
Review Completed on:

Fourth Review
LID Plan Received on:
Review Completed on:

Fifth Review
LID Plan Received on:
Review Completed on:

Sixth Review
LID Plan Received on:
Review Completed on:

LID Plan Check Correction Sheet_Trump National_2018.07.23_REVISED.pdf

ITEMS REQUIRING CORRECTIONS:

Note:

- *The project is over 1 acre and will require a Storm Water Pollution Prevention Plan (SWPPP). Note, if the construction activity is part of a larger common plan of development, it must be accounted for in the SWPPP prepared for the property as a whole. The SWPPP must be submitted for review and deemed compliant with the CGP. Once authorized, the SWPPP must be uploaded to SMARTS and issued a WDID # prior to approval of the LID Plan.*

1. Multiple Sections – The project area is unclear and inconsistently described throughout the SUSMP. For instance, the following inconsistencies were noted:
   a. Sections 1.2 (Page 2): Table specifies the "project area" is 25.86 acres,
   b. Section 1.2 (Page 3): Table indicates the tabulated total area is 26.34 acres,"
   c. Section 2.1 (Pages 14-31), "LID Site Plan" (Attachment F): 'LID Results' table, HydroCalc sheets, BMPs table, and the "LID Site Plan" indicate the tabulated total area is 15.53 acres,

   The SUSMP must clearly describe the development's *disturbed* area.
2. BMP Selection and Sizing Calculations – The following must be addressed:
   a. The SUSMP indicates several portions of the site are treated by filter inserts as the sole treatment; however, filter inserts are considered pre-treatment measures, not BMPs. Note, all disturbed areas (100%) must be treated by BMPs prior to discharge.
   b. The SUSMP (Section 1.2, Page 4) indicates that the $SWQD_V$ is "pumped to the Lake at Hole No 9…Lake No. 9 is one of a three lake system that was previously approved and constructed to harvest and reuse water runoff from the golf course." Provide BMP sizing calculations that demonstrate the required $SWQD_V$ is treated by the proposed BMP. If a non-proprietary BMP is utilized, sizing calculations must follow an approved published design standard (City Manuals, County Manuals, Caltrans, CASQA, etc.). Each design standard used must be referenced in the SUSMP and the calculations must be followed step-by-step with no alterations. Additionally, if a pump is proposed, sizing calculations must be provided to demonstrate the pump is sized to convey the $SWQD_V$ to the proposed BMP.
   c. The SUSMP (Section 1.2, Page 4) indicates that "a 6 inch diversion pipe" directs $SWQD_V$ to the lake at Hole No. 9; however, calculations must be provided to demonstrate the diversion pipe is sized to convey the $SWQD_V$ to the proposed BMP.
   d. The SUSMP (Page 4) indicates a 24'' storm drain (Line P) will be constructed and convey a portion of $SWQD_V$ (from CB-10, CB-11) to the "confluence Line Q at Point B and continuing to connect with Line N at Point D;" however, it appears as though $SWQD_V$ is comingled with additional flow from Line P (i.e. from CB-8, CB-9, CB-12, and CB-13). Note, it is unclear whether this flow is upstream or downstream of the proposed 6'' diversion pipe at Point B. If $SWQD_V$ is comingled with this flow, it must be directed to the BMP, and the BMP must be sized to accommodate the additional run-on.
3. Section 1.2, Project Description – The following must be addressed:
   a. Provide a detailed description of the impervious and pervious condition for each DMA, which will be utilized to confirm the $SWQD_V$ calculations provided throughout the SUSMP. Note, the site-specific impervious condition must be utilized in the sizing calculations.

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b. The proposed drainage from each DMA (i.e. downspouts, sheet flow, hard pipe, etc.) must be described in detail. It must be clear how onsite runoff will be conveyed to the BMP. Additionally, provide narrative in the report as to the drainage of treated $SWQD_V$ from the project site after entering the proposed BMPs.

c. Provide clarification regarding the location of the "park (that) is improved and owned by the City." For instance, revise narrative (Page 3) to identify the location of the 'park' (i.e. specify the DMA).

d. The report indicates "as a condition of approval…water quality measures are to be provided for…all proposed catch basins;" however, it appears as though several catch basins are located in the City's right-of-way (i.e. Palos Verdes Drive South, etc.). If ownership of the filter inserts will be transferred to the City, the SUSMP must include an Attachment indicating the City's intent to accept the filter inserts as designed.

e. The SUSMP (Page 4) indicates "the temporary storm drain pipe between CB-8 and Point C would be removed;" however, it is unclear where drainage from CB-8 is ultimately directed. Revise narrative to provide clarification and/or provide Plans that demonstrate where drainage from CB-8 is directed.

4. Plans – The Driving Range /Lot Layout exhibit and "LID Site Plan" do not contain much of the information necessary to fully evaluate the project. The following must be addressed:

   a. Full-sized copies (24" x 36" or larger) of all relevant plans (i.e. grading plans, storm drain plans, utility plans, plumbing plans, drainage plans, architectural plans, etc.) showing the project with all proposed structural BMPs and water quality notes must be provided.

   b. The Plans must indicate the quantity and make/model for each BMP and filter insert, locations of all structural BMPs (i.e. BMPs, filter inserts, storm drain stenciling, etc.), cross-sectional details of each structural BMP, conveyance systems, drainage connections, overflow processes, etc. The cross-sectional detail of the BMP must follow the design criteria from the design standard used.

   c. The invert elevations for all storm drains, catch basins, and BMPs must be provided to show the BMP drainage and overflow process. Additionally, if roof downspouts are proposed, they must be indicated as such (i.e. with construction notes) on plans designated for construction activities. For instance, the report indicates that the residential lots are divided into two DMAs; however, it is unclear whether the roof drainage is being split into two drainage areas.

5. O&M Plan – The Operations and Maintenance (O&M) Plan must list and describe the BMP. Include details such as maintenance procedures, requirements, inspections, and frequencies. Include language describing maintenance frequency and requirements when the system is not functioning properly (i.e. remove sediment buildup when necessary, clear out all observed trash and debris, etc.). The name, address, email, etc. of the specific entity (individual, not company) needs to be identified.

Items required for approval of the SUSMP, but are not required at this time:

6. Title Page – The front pages identifies the SUSMP as "Low Impact Development (LID Plan) / Water Quality Management Plan (WQMP);" however, since the project will be following the 2001 MS4 Permit requirements, the front page must be revised to instead specify the SUSMP as "Standard Urban Stormwater Mitigation Plan (SUSMP)." Note, this comment also applies to revision of the

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entire report/relevant documents. Upon revision, the front page must be signed and stamped with wet ink application by a California licensed civil engineer prior to SUSMP approval.

7. Owner's Certification – The certification must list the owner's name (individual, not company) who is signing the page. Additionally, it is unclear whether the landowner's company is "VH Property Corp" or "The Trump Organization" as throughout the report both companies are listed. Once revised, the certification must be signed and stamped with wet ink application by the landowner or approved signatory. An approved signatory (e.g. "President," "Vice President," "Representative," etc.) must be a partner to the company which owns the title to the land, or equivalent. If the individual signing the documents is an approved signatory, documents indicating the designated signatories (i.e. Certificate of Secretary, California All-Purpose Acknowledgment, notarized Acknowledgment, etc.) must be included for approval of the SUSMP.
8. Engineer's Certification – An outdated certification page was utilized (i.e. references the 2012 Permit), and must be replaced by the appropriate certification page (see attached). The certification page must be signed, dated, and stamped with wet ink application by a California licensed civil engineer.
9. Section 1.0, Purpose and Scope – Revise narrative to specify "the SUSMP requirements per the 2001 MS4 Permit are being followed as the project received planning entitlement prior to adoption of the 2012 MS4 permit."
10. MCA – The City's Master Covenant Agreement (MCA) form must be utilized (see attached). The MCA must indicate the quantity, make, model, size, and type (as applicable) of all structural BMPs proposed (i.e. filter inserts, BMPs, etc.) and sump pump(s) (if applicable). The MCA must have an attached Operations and Maintenance (O&M) Plan, 8.5"x11" BMP Exhibit, and signed Owner's Certification page. Once the MCA is approved by JLHA, it must be signed and dated with wet ink application by the owner and notarized and recorded (along with attachments) with the County Recorder's Office.
11. City Forms – The following must be addressed:
    a. Form OC-1: An outdated form was utilized and must be replaced with the current form (see attached). The form must be signed and dated by the owner (or approved signatory) and a licensed California civil engineer with wet ink signatures prior to approval of the SUSMP.
    b. Form P2: The form must be provided (see attached). Fill out all fields. The BMP information should be organized such that there is one row for each BMP. Once completed, the form must be signed, dated, and stamped with wet ink application by a California licensed civil engineer.
12. Wet Ink Signature and Stamp on Grading Plans – Full-sized copies (24" x 36" or larger) of all relevant plans (i.e. grading plans, drainage plans, etc.) showing the site with all proposed BMPs and water quality notes must be signed and stamped with wet ink application by a California licensed civil engineer.
13. Three (3) hard copies of the SUSMP (with the front page of each signed, stamped, and dated by a licensed California civil engineer), three (3) copies of the full-sized grading plans (each sheet signed, stamped, and dated by a licensed California civil engineer), one (1) copy of all original (wet ink documentation) forms and certifications, and one (1) electronic copy (email, CD, download from FTP site, etc.) of all documents listed above must be provided.

Engineer Certification _SUSMP.pdf

ENGINEER'S CERTIFICATION

STANDARD URBAN STORMWATER MITIGATION PLAN

Preparer (Engineer) Certification			
Preparer (Engineer):			
Title		PE Registration #	
Company			
Address			
Email			
Telephone #			
I hereby certify that this Standard Urban Stormwater Mitigation Plan is in compliance with, and meets the requirements set forth in, Order No. 01-182/NPDES No. CAS004001, of the Los Angeles Regional Water Quality Control Board.			
Preparer Signature		Date	
Place Stamp Here			